

Annual Reporting Form for the Pesticide General Permit (PGP)

This form is for any Operator that is a Decision-maker required to submit an NOI. The annual report must be submitted no later than February 15 of the following year for all pesticide activities covered under the permit occurring during the previous calendar year as detailed in Part 7 of the permit.

A. General Information

1. NPDES Permit Tracking Number:

TNP100002

2. Operator Name:

shelby County Health Department

3. Operator Contact Information:

a. Street: 814 Jefferson Ave

b. City: Memphis

 $|T|N$

d. ZIP: 38105

e. Telephone: 901-222-9079

4. Contact Information:

a. Contact
Name:

Dr. Tyler Zerwekh

b. Title:

Administrator Environmental Health Services Bureau

c. E-mail:

tyler.zerwekh@shelbycountyttn.gov

B. Adverse Incidents and Corrective Actions

1. Was an adverse incident observed and/or corrective actions taken for any Pest Management Area for which you have coverage under the permit?

a. ☒ No adverse incidents were observed or corrective action was taken. (Proceed to Section C)

b. ☐ Yes, an adverse incident was observed and/or a corrective action was taken. (Complete questions 2-6 for each Pest Management Area in which adverse incidents were observed or corrective actions were taken. Copy this section for non-electronic submissions).

Pest Management Area # _____ of ## _____

2. Pest Management Area Name:

3. If applicable, provide the date for any adverse incidents as a result of those treatment(s), as described in Part 6.4 of the permit (use additional pages, if needed):

Date of adverse incident observation:

[illegible]

4. Date and time the Operator contacted the division to notify the Agency of the adverse incident, who the Operator spoke with at the division, and any instructions received from the division.

a. Date:

c. Who the Operator spoke with at the division:

b. Time:

d. Instructions received from the division:

5. Date of submission of Thirty (30)-Day Adverse Incident Written Report:

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

6. Describe any corrective action(s), including spill responses, resulting from pesticide application activities and the rationale for such action(s), subsequent to those steps described in the Thirty (30)-Day Adverse Incident Written Report:

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# 1 of ## 1

1. Have any discharges from pest control activities occurred in this calendar year?

- a. ☐ No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
b. ☒ Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:

- a. ☒ Mosquito and Other Flying Insect Pest Control b. ☐ Weed and Algae Pest Control
c. ☐ Animal Pest Control d. ☐ Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

a. Provide a description of the treatment area within this Pest Management Area, including location description:

See Appendix A, B, and C as well as Figure 1.

b. Size of treatment area (in acres or linear feet): 488.27 acres or _____ linear feet.

c. Name or location of any waters of the state to which discharges occurred:

See Appendix A

d. Target Pest(s): Mosquitoes

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A): ☒

Company Name: _____

Street: _____

City: _____

State: ☐ ☐ ☐

ZIP Code: _____

Contact _____

Phone _____

E-mail: _____

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: ☒ Yes ☐ No ☐ Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons. Add additional pages if necessary.

Product Name <u>Bionist 4+4</u>	Quantity Applied (lbs or gallons of product):	Product Name <u>Kontrol 4-4</u>	Quantity Applied (lbs or gallons of product):
<u>EPA Reg No. 8329-35</u>		<u>EPA Reg. No. 73748-4</u>	
Application method:		Application method:	
a. <input type="checkbox"/> Aerially by fixed-wing _____ lbs or gallons		a. <input type="checkbox"/> Aerially by fixed-wing _____ lbs or gallons	
b. <input type="checkbox"/> Aerially by rotary aircraft _____ lbs or gallons		b. <input type="checkbox"/> Aerially by rotary aircraft _____ lbs or gallons	
c. <input checked="" type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) <u>3778</u> lbs or <u>gallons</u>		c. <input checked="" type="checkbox"/> Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) <u>1489</u> lbs or <u>gallons</u>	
d. <input type="checkbox"/> Aquatic vehicle mounted sprayer _____ lbs or gallons		d. <input type="checkbox"/> Aquatic vehicle mounted sprayer _____ lbs or gallons	
e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications) _____ lbs or gallons		e. <input type="checkbox"/> Direct mixture (includes metering, subsurface applications) _____ lbs or gallons	
f. <input type="checkbox"/> Chemigation _____ lbs or gallons			
g. <input type="checkbox"/> Other (specify): _____ lbs or gallons			

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area# of ##

1. Have any discharges from pest control activities occurred in this calendar year?
- a. ☐ No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. ☒ Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:

- a. ☒ Mosquito and Other Flying Insect Pest Control b. ☐ Weed and Algae Pest Control
- c. ☐ Animal Pest Control d. ☐ Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:

See Appendix A, B, C as well as Figure 1

- b. Size of treatment area (in acres or linear feet): 488.293 acres or _____ linear feet.

- c. Name or location of any waters of the state to which discharges occurred:

See Appendix A

- d. Target Pest(s): Mosquitoes

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A): ☒

Company Name:

Street:

City:

State:

ZIP Code:

Contact

Phone

E-mail:

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: ☒ Yes ☐ No ☐ Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons. Add additional pages if necessary.

Product Name GB-1111

EPA Reg. No. 8329-72

Quantity Applied (lbs or
gallons
of product):

Product Name Vectorex CG

EPA Reg. No. 73049-20

Quantity Applied (lbs or
gallons
of product):

Application method:

- a. ☐ Aerially by fixed-wing _____ lbs or gallons
- b. ☐ Aerially by rotary aircraft _____ lbs or gallons
- c. ☒ Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) 109.5 lbs or gallons
- d. ☐ Aquatic vehicle mounted sprayer _____ lbs or gallons
- e. ☐ Direct mixture (includes metering, subsurface applications) _____ lbs or gallons
- f. ☐ Chemigation _____ lbs or gallons
- g. ☐ Other (specify): _____ lbs or gallons

Application method:

- a. ☐ Aerially by fixed-wing _____ lbs or gallons
- b. ☐ Aerially by rotary aircraft _____ lbs or gallons
- c. ☐ Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) _____ lbs or gallons
- d. ☐ Aquatic vehicle mounted sprayer _____ lbs or gallons
- e. ☐ Direct mixture (includes metering, subsurface applications) _____ lbs or gallons

f. _____ lbs or gallons
y) g. ☒ Other Broadcast 3316.3 (lbs) or gallons

C. Pest Management Area(s) (use additional pages for each Pest Management Area)

Pest Management Area#___ of ##___

1. Have any discharges from pest control activities occurred in this calendar year?
- a. ☐ No discharge from pest control activities this calendar year. Note: Checking this box completes Section C if you had no discharge from pest control activities this year. Proceed to section D.
- b. ☒ Yes. Proceed to question 2.

2. Indicate the pesticide use pattern for the Pest Management Area:

- a. ☒ Mosquito and Other Flying Insect Pest Control b. ☐ Weed and Algae Pest Control
- c. ☐ Animal Pest Control d. ☐ Forest Canopy Pest Control

3. For each treatment area (use additional pages for each treatment area):

- a. Provide a description of the treatment area within this Pest Management Area, including location description:

See Appendix A, B, C as well as Figure 1

- b. Size of treatment area (in acres or linear feet): 488.23 acres or _____ linear feet.

- c. Name or location of any waters of the state to which discharges occurred:

See Appendix A

- d. Target Pest(s): Mosquitoes

4. Name and contact information for pesticide applicator(s) (or check here if same as provided in Section A): ☒

Company Name:

Street:

City:

State:

ZIP Code:

Contact

Phone

E-mail:

5. Was this pest control activity addressed in your Pesticide Discharge Monitoring Plan (PDMP) before pesticide application: ☒ Yes ☐ No ☐ Not Applicable

6. Enter the total amount of each pesticide product applied for the reporting year by the product name, EPA Registration Number(s) and by application method. Circle if quantity indicated is in lbs or gallons: Add additional pages if necessary.

Product Name Vectobac G

EPA Reg. No. 73049-10

Quantity Applied (lbs or
gallons
of product):

Product Name _____

Quantity Applied (lbs or
gallons
of product):

Application method:

- a. ☐ Aerially by fixed-wing _____ lbs or gallons
- b. ☐ Aerially by rotary aircraft _____ lbs or gallons
- c. ☐ Land-based sprayer (includes backpack, land vehicle mounted sprayers, high pressure canopy sprayer) _____ lbs or gallons
- d. ☐ Aquatic vehicle mounted sprayer _____ lbs or gallons
- e. ☐ Direct mixture (includes metering, subsurface applications) _____ lbs or gallons
- f. ☐ Chemigation _____ lbs or gallons
- g. ☒ Other (specify): *Broadcast* 721.7 ~~lbs~~ or gallons

Application method:

- a. ☐ Aerially by fixed-wing _____ lbs or gallons
- b. ☐ Aerially by rotary aircraft _____ lbs or gallons
- c. ☐ Land-based sprayer (includes backpack,
land vehicle mounted sprayers, high
pressure canopy sprayer) _____ lbs or gallons
- d. ☐ Aquatic vehicle mounted sprayer _____ lbs or gallons
- e. ☐ Direct mixture (includes metering, subsurface
applications) _____ lbs or gallons
- _____ lbs or gallons
- _____ lbs or gallons

 \bar{y} :

D. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. On the basis of my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. A false statement is subject to the penalties of perjury.

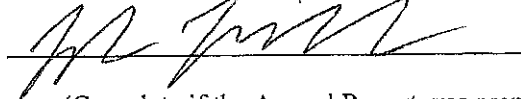
Printed Name: Tyler Zerwekh

Title: Administrator, Environmental Health Services Bureau

E-Mail: Tyler.Zerwekh@shelbycountyttn.gov

Signature/Responsible

Official:



Date: 01 22 2013

Annual Report Preparer (Complete if the Annual Report was prepared by someone other than the certifier)

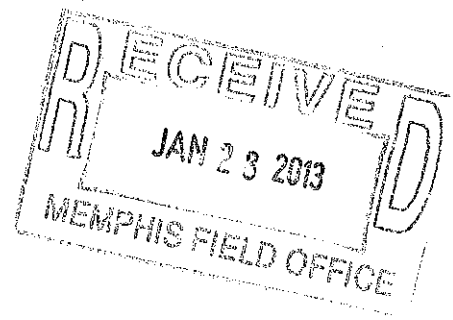
Preparer Name: Ture Carlson

Organization: Shelby County Health Department

Phone: 901 - 222 - 9715

Date: 01 15 2013

E-Mail: ture.carlson@shelbycountyttn.gov



2012 Shelby County Health Department Annual Report of Pesticide Applications

Shelby County Health Department
NPDES Tracking Number TNP100002
Ture Carlson, M.S., R.E.H.S.
Entomologist
ture.carlson@shelbycountyttn.gov
2480 Central Ave.
Memphis, TN 38105
(901) 222-9727

Shelby County Health Department performs two types of pesticide applications to waters of Tennessee larvicide and adulticide. Shelby County has an area of 784 square miles or 501,760 acres. Meeman Shelby State Park is located entirely within Shelby County and no mosquito abatement occurs within its 13,467 acres. The remaining 488,293 acres are divided into 163 operational zones. All the operational zones can be seen in Figure 1 and the waters of the state located within each zone can be found in Appendix A.

Adulticiding

The amount of adulticide used in each zone is provided in Appendix B. Two adulticides were used during the 2012 mosquito season Clarke's Biomist 4+4 EPA Registration Number 8329-35, and Masterline's Kontrol 4-4 EPA Registration Number 73748-4 (see Table 1). Both of these products were applied using Ultra Low Volume (ULV) truck mounted sprayers. Application of adulticides was addressed in the Pesticide Discharge Management Plan (PDMP) and is used as a method to control adult mosquitoes in order to lower the risk of mosquito born disease as well as reducing the number of biting nuisance mosquitoes. All the operational zones exceeded the action threshold set forth in the PDMP before the application of adulticide began.

Larviciding

During the 2012 mosquito season 1,608 locations were treated with approved larvicides in order to control mosquito populations. Mainly two larvicides were used Vectolex CG EPA Registration Number 73049-20 and Vectobac G EPA Registration Number 73049-10 (see Table 1). Vectolex CG and Vectobac G are solid granules that are applied using calibrated measuring cups and broadcasted evenly over the waters surface area. A third pesticide that was used is GB-1111 EPA Registration Number 8329-72 (see Table 1). GB-1111 was mainly used as a pupicide and in locations where the water was highly polluted, most commonly in the presence of sewage. GB-1111 is a liquid that is applied using a calibrated backpack sprayer. The amount of pesticide used and the square feet of surface water treated can be found in Appendix C. In Appendix C the quantity of Vectolex CG and Vectobac G are reported in ounces and the quantity of GB-1111 is reported in gallons. All applications of larvicides exceeded the action set forth in the PDMP before application began.

Table 1: Pesticides Used In, Near, or Above Waterways of the State

Type of Pesticide	Brand Name	EPA Reg No	EPA Est No
Adulticide	Biomist 4+4	8329 – 35	8329 – IL – 01
Adulticide	Kontrol 4-4	73748 – 4	53883 – TX – 002
Larvicide	GB-1111	8329 – 72	8329 – IL – 01
Larvicide	Vectolex CG	73049 – 20	33762 – IA – 001
Larvicide	Vectobac G	73049 – 10	33762 – IA – 001

Adverse Incidents

No adverse incidents were reported to or observed by employees of Shelby County Health Department Vector Control Section.

Figure 1: Map of ULV Operational Zones in Shelby County

